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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,221	10/03/2007	Scott E. Hall	US03 0497 US2	1679

24738 7590 04/06/2011
PHILIPS INTELLECTUAL PROPERTY & STANDARDS
PO BOX 3001
BRIARCLIFF MANOR, NY 10510-8001

EXAMINER

CHIN, RANDALL E

ART UNIT	PAPER NUMBER
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3723

NOTIFICATION DATE	DELIVERY MODE
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04/06/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/581,221	Applicant(s) HALL ET AL.	
	Examiner Randall Chin	Art Unit 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,8,10 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,8,10 and 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. At the outset, in response to applicant's comments that the examiner's objections in the previous Office action to Figures 7 and 8 were not completely clear, the drawings were objected to because in the additional new drawings of Figs. 7 and 8, the disclosure of the **relative difference in sizes/lengths** of the wing portions (i.e., as shown in Figs. 7 and 8) constitutes new matter. In other words, applicant filed an additional new sheet of drawings on 22 September 2010 showing added new Figures 7 and 8 wherein Figure 7 showed wing portions of a **longer** length and Figure 8 showed wing portions of a **shorter** length. There appeared to be no original support for that shown by having the wing portions being **longer** (i.e., in Figure 7) and **shorter** (i.e., in Figure 8). In any case, any such concerns by the examiner for new matter are now moot and now overcome by applicant's canceling of Figure 8 in the latest amendment filed 25 March 2011.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the paddle members "extending for substantially the entire length of the bristle field" as recited in claim 8, lines 5-6, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

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replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 1 is objected to because of the following informalities:

In claim 1, the recitation of "the lowest bristles" (lines 6-7) and "the tallest bristles" (lines 7-8) makes the claim scope unclear since the claim never previously mentions that the bristles are of different heights. In other words, "the lowest bristles" (lines 6-7) and "the tallest bristles" (lines 7-8) lack proper antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Adamsson 2,312,828 (hereinafter Adamsson).

As for claim 1, the patent to Adamsson discloses in Figs. 1-5 a rimmed brushhead comprising a brushhead member 11, which includes a bristle field 12 or 13, “adapted for cleaning teeth as part of a power toothbrush” (merely functional), “wherein the brushhead member in operation moves in a reciprocating action” (i.e., by hand), and a ridge or rim member 16 extending around at least a substantial portion of the bristle field of the brushhead, the rim member 16 having an upper edge which is lower than the top of the lowest bristles (Figs. 1-5) and has a height which is deemed to be approximately one-half the height of the tallest bristles in the bristle field as best shown in Figs. 2-5 (by clear and apparent visual view) since the “rim member” 16 **can also include here the outer peripheral wall height extending downwards to the bottommost portion of the brushhead 11 as well (note, Merriam Webster’s Collegiate Dictionary, Tenth Edition defines “rim” as the outer often curved or circular edge or border of something)**, “and otherwise configured and arranged to produce movement of fluid from the bristles toward the teeth during operation of the toothbrush” (at least to an extent; merely functional). Adamsson is deemed to teach all

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of the recited limitations of claim 1 by itself since any powered feature of the toothbrush has not been positively claimed (see preamble merely reciting "A rimmed brushhead *for a power toothbrush...*").

As for claim 2, the rim member is substantially continuous around the bristle field (Figs. 2-5; p. 2, col. 1, lines 15-21).

As for claim 3, there is a difference in flexibility between the rim member and the bristles in the bristle field as an inherent result of being different materials, resulting in differential motion between the bristles and the rim member and a pumping action for the fluid toward the teeth (and merely functional).

As for claim 4, the rim member is deemed "separate" (at least in terms of spacing; a broad term here) from the brushhead member.

As for claim 5, the rim member is integral with the brushhead member.

As for claim 7, the recitation "substantially all of the fluid moving off the bristles is directed toward the teeth and gums of a user" is merely functional in form adding no further structural limitations to the claim(s).

6. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuo 2003/0077107 (hereinafter Kuo).

As for claim 1, Kuo discloses in Figs. 1a-1e and 2a-2f, for example, a rimmed brushhead comprising a platform or brushhead member 7, which includes a bristle field 15, 15', "adapted for cleaning teeth as part of a power toothbrush" (merely functional),

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“wherein the brushhead member in operation moves in a reciprocating action” (i.e., by hand), and guard or rim member 5, 13 (paragraph [0062]) extending around at least a substantial portion of the bristle field of the brushhead (Figs. 1a or 1d), the rim member 5, 13 having an upper edge which is lower than the top of the lowest bristles (Figs. 1a) and has a height which is deemed to be approximately one-half the height of the tallest bristles in the bristle field (Figs. 1a, 1c, 1d, 2a, 2b and 2c), “and otherwise configured and arranged to produce movement of fluid from the bristles toward the teeth during operation of the toothbrush” (at least to an extent; merely functional). Kuo is deemed to teach all of the recited limitations of claim 1 by itself since any powered feature of the toothbrush has not been positively claimed (see preamble merely reciting “A rimmed brushhead *for a power toothbrush*...”).

As for claim 2, the rim member 5, 13 is deemed “substantially continuous” around the bristle field (Figs. 1a and 1d).

As for claim 3, there is a difference in flexibility between the rim member 5, 13 and the bristles 15, 15' in the bristle field as an inherent result of being different materials (paragraph [0065]), resulting in differential motion between the bristles and the rim member and a pumping action for the fluid toward the teeth (and merely functional; see paragraph [0062] which discusses flexibility of the wall or rim member 5, 13).

As for claim 4, the rim member 5, 13 separate since it is attached to the brushhead 7 (paragraph [0062]).

As for claim 5, the rim member is deemed integral with the brushhead member (i.e., at least at final assembly) .

As for claim 7, the recitation “substantially all of the fluid moving off the bristles is directed toward the teeth and gums of a user” is merely functional in form adding no further structural limitations to the claim(s).

Claim Rejections - 35 USC § 103

7. Claims 8, 10 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calabrese 2002/0124337 (hereinafter Calabrese) in view of Shipp 5,604,951 (hereinafter Shipp).

As for claim 8, Calabrese discloses in Figs. 1b, 2, 5 and 7 (more particularly, Fig. 5), for example, a brushhead member 2 “for a power toothbrush” (not a positive limitation), which includes a bristle field 3, adapted for cleaning teeth as part of a power toothbrush, “wherein the brushhead member in operation moves in a reciprocating action” (not a positive limitation; see preamble language), at least two paddle members 4, 4 positioned on the brushhead member (Fig. 5), the paddle members 4, 4 each being straight (Fig. 5 embodiment), continuous, substantially equal in size, and extending for substantially the entire length of the bristle field (i.e., at least to the extent that the paddle member *can* extend for substantially the entire length of the bristle field *and at the same time* be surrounded entirely by bristles and in the same sense as **shown** by Applicant's Figs. 5, 6 and 7 but still see Calabrese paragraph [0011]), the paddle members extending upwardly from a bristle base with the bristles 3, wherein the paddle members are not as high as the bristle field (Fig. 7), wherein there are no bristles between the two paddle members 4, 4 (Fig. 5), and are “otherwise configured and

arranged to produce movement of fluid from the bristles toward the teeth during operation of the toothbrush” (at least to an extent; merely functional). Note further that Calabrese shows a bristle field 3 basically extending entirely around the paddle members 4, 4 with the exception of at one lateral end, for example, in Fig. 5.

Even assuming *arguendo* that Calabrese did not adequately disclose the paddle members extending for substantially the entire length of the bristle field, the patent to Shipp discloses in Figs. 1-3 a rectangular prophy or paddle member device 18 extending for substantially the entire length of the bristle field and wherein the bristle field 26, 28, 30 extends entirely around the paddle member 18. It would have been obvious to one of ordinary skill in the art to have modified Calabrese’s brushhead such that the paddle members extend for substantially the entire length of the bristle field and wherein the bristle field extends entirely around the paddle members as taught by Shipp for increasing the polishing surface and brushing area for improved brushing and polishing efficiency. It will be further added that Shipp, at least suggests to one of ordinary skill, that the rectangular prophy wall or device could well be duplicated (i.e., provide for at least more than one) such that there can be more than one of these prophy elements 18 for the Fig. 1 embodiment for the purpose of increasing the surface area contacting teeth (col. 4, lines 1-10).

As for claim 10, in Calabrese, the paddle members 4 extend “substantially longitudinally” (deemed a broad recitation) of the brushhead (Fig. 4).

As for claim 13, in Calabrese, the paddle members are still deemed parallel (Fig. 4).

As well as claim 14 is understood and to the extent that this is shown in Applicant's figures, the paddle members 4, 4 are deemed sufficiently different in "configuration" (i.e., at least with respect to the bristle members or in the sense that they are differently "configured" by being simply physically spaced from each other) that they can move out of phase with each other during movement of the brushhead 2. The paddle members 4, 4 could also be of different material since "one or more" components can be chemically modified by a chemical surface treatment or surface oxidation (Calabrese paragraph [0037]).

As for claim 15, the paddle members 6 clearly have a different flexibility from the bristles (paragraphs [0024], [0025] and [0033]).

As for claim 16, in Calabrese, there are wing portions (not explicitly labeled but still clearly shown in Fig. 9) formed by ridge 7 which extend outwardly from the paddle members along the length thereof (Fig. 9; paragraph [0055]).

As for claim 17, in Calabrese, there are also wing portions at opposing ends of the paddle members (Fig. 9; paragraph [0055]).

Conclusion

8. Applicant's arguments filed 25 March 2011 have been fully considered but they are not persuasive.

Applicant's argument with respect to the height of Adamsson's "rim member" is deemed adequately addressed and explained by the above art rejection to Adamsson and Urbush.

As for Applicant's argument that Shipp fails to teach that the prophy cups extend for the **entire length** of the brushhead, it should be noted that the features upon which applicant relies (i.e., extending the **entire** length of the brushhead) is/are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In any case, again, Calabrese is deemed to teach this feature at least to the extent that the paddle member *can* extend for "**substantially** the entire length of the bristle field" *and at the same time* be surrounded entirely by bristles and in the same sense as **shown** by Applicant's Figs. 5, 6 and 7 but still see Calabrese paragraph [0011]). Even assuming that Calabrese did not teach such feature, Shipp is deemed to teach the limitation of rectangular prophy cups or walls 18 extend for the **entire length** of the brushhead (Figs. 1-3 of Shipp), as already explained in the rejection above. Given what is actually shown in Applicant's Figs. 5, 6 and 7 for the paddle members and what is actually explicitly being claimed, Applicant's arguments are unconvincing.

For these reasons, the rejection of claims 1-5, 7, 8, 10 and 13-17 are deemed proper.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Randall Chin/
Primary Examiner, Art Unit 3723

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